



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,228	02/13/2004	Angel Lorenzo Barroso	Q-79063	2507
23373	7590	11/25/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			KIM, SANG K	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/777,228

Applicant(s)

LORENZO BARROSO, ANGEL

Examiner

SANG KIM

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-20 is/are rejected.
- 7) ☒ Claim(s) 1-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/14/05</u> . | 6) <input type="checkbox"/> Other: _____  |

***Claim Objections***

Claims 1-9 are objected to because of the following informalities:

It is suggested that claim 1 should be rewritten as it follows:

Line 6, delete the phrase, "transversally inwards and";

Line 11, "section that varies," should be --cross section that varies over a length thereof,--;

Line 12, delete the phrase, "in a movement similar to winding,".

Appropriate corrections are required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 18-19 are indefinite and vague. How can a cross sectional area of the grooves and flanges be constant when the independent claim 10 states that the cross sectional area of the annular groove and the flange varies? Claims 18-19 are contradicting the independent claim 10. Because of the indefiniteness, claims 18-19 cannot be meaningfully treated with respect to the prior art at this time.

***Claim Rejections - 35 USC § 102***

Art Unit: 3654

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 10-14, 16-17, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Charlton, US 2002/0053625 A1.

With respect to claims 10 and 20, Charlton '625 shows a central body 14 with a flange 7 at a first end of the central body; a disc 9 at the first end of the central body; wherein the disc comprises an annular groove (near 7a and 8a which are in the recess area); wherein the flange 7 is removably fitted with the annular groove; and wherein a cross-sectional area of at least one of the annular groove and the flange over a length thereof (each spaced tooth 7 corresponds to with each spaced tooth 7a from the base and they both have a cross-sectional area that varies); wherein when the flange 7 is fitted with the annular groove and the disc 9 is rotated in a first direction (when assembling the spool) with respect to the central body, the frictional fit between the groove and the flange increases, and when the disc is rotated in a second direction (when disassembling the spool), opposite the first direction, the frictional fit between the groove and flange decreases, see figures 1-5.

With respect to claims 11-12, Charlton '625 shows a second disc (9 on the other end) with a second annular groove which is a mirror image of the first disc, see figures 1-5.

With respect to claims 13-14, Charlton '625 shows the central body comprises two separate semi-cylindrical halves 5,6, see figure 1.

With respect to claim 16, Charlton '625 shows the flanges (near the end wall 6) have a substantially triangular cross-section, see figure 1.

With respect to claim 17, Charlton '625 shows the flanges further comprises indentations 8 at each end which are arranged between portions of the flanges, see figure 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Charlton, US 2002/0053625 A1, in view of Crellin, Jr. U.S. Patent No. 3785584.

Charlton '625 shows the discs 9 have a diameter which is greater than the diameter of the central body 14 and wherein the discs further comprise central recesses, see figures 1-5.

Art Unit: 3654

Crellin '584 shows the discs 10 have a diameter which is greater than the diameter of the central body 12 and wherein the discs further comprise central openings, see figure 1.

Charlton '625 discloses the claimed invention except for central openings on the discs. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the recesses of the Charlton '625 into openings as taught by Crellin '584, to help reduce weight or save material cost.

#### ***Allowable Subject Matter***

Claim 1 would be allowable if rewritten or amended to overcome the objection(s), set forth in this Office action.

Claims 2-9 would be allowable if rewritten to overcome the objection(s), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Claims 10-20 have been added.

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

The amendment adding new claims 10-20 necessitated the new grounds of rejection as set forth above.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG KIM whose telephone number is 571-272-6947. The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:30 P.M. alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki, can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 3654

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

SK

11/18/05

A handwritten signature in cursive script that reads "Kathy Matecki".

KATHY MATECKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600